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(54) Title: PROCESS FOR ACTINOL PRODUCTION FROM KETOISOPHORONE

(57) Abstract: Disclosed is a process for producing actinol from ketoisophorone which comprises contacting ketoisophorone with a recombinant microorganism or cell-free extract thereof in a reaction mixture, wherein said recombinant microorganism is obtainable by transforming a host microorganism, e.g. selected from the group consisting of microorganisms of the genera Saccharomyces, Zygosaccharomyces, and Candida, such as commercially available baker's yeast, Saccharomyces cerevisiae ATCC7754, Saccharomyces rouxii (Zygosaccharomyces rouxii) HUT7191 (IFO 0494), Saccharomyces delbrueckii HUT7116 (Saccharomyces unisporus IFO 0298), Saccharomyces delbrueckii (Torulaspora delbrueckii) HUT7102, Saccharomyces willianus HUT7106, Zygosaccharomyces bailii ATCC11486, Candida tropicalis IFO 1403, and a mutant thereof, which is capable of reducing ketoisophorone to levodione with a levodione reductase gene, e.g. a levodione reductase gene derived from a microorganism belonging to the genus Corynebacterium, such as C. aquaticum AKU611 (FERM BP-6448) or a mutant thereof, and isolating the produced actinol from the reaction mixture.

